Application/Control Number: 10/539,618

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## DETAILED ACTION

## EXAMINER'S AMENDMENT

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Townsend Keith on 1/13/2009.

In claims:

Claim 25, line 3; "after phase (Per)" at the end of the line, insert --using decomposition device--.

Claim 25, line 4; "the corrector" should be changed to --a corrector--.

Claim 25, lines 6; "the minimum of the out-of-band noise power (Nh) of the output signal" should be changed to --a minimum of an out-of-band noise power (Nh) of an output signal--.

Claim 25, line 11; after "envelope e<sub>er</sub>", insert -to generate a corrected envelope e'<sub>er</sub>—

Claim 25, line 14; "the frequency domain of the signals" should be changed to --a frequency domain of signals--.

Claim 25, line 16; "the comparison of the out-of-band noise powers" should be changed to -comparing the out-of-band noise powers-.

Claim 25, line 17; between "for" and "c"; insert --corrector--.

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Claim 25, line 17; "the smallest" should be changed to --a smallest--.

Claim 26, line 1; "A loop for correcting at least one parameter to be corrected" should be changed to --A transmitter having a correction loop for correcting at least one parameter--.

Claim 26, line 13; "the minimum out-of-band noise power (Nh) of the output signal" should be changed to --a minimum out-of-band noise power (Nh) of an output signal--.

Claim 26, lines 16 and 17, after "envelope  $e_{er}$ ", insert --to generate a corrected envelope  $e'_{er}$ ---.

Claim 26, line 20; "the signals" should be changed to -signals --.

Claim 26, line 21; "the frequency domain" should be changed to --a frequency domain--.

Claim 26, line 23; between "for" and "c"; insert --corrector--.

Claim 26, line 23; "the smallest" should be changed to --a smallest--.

Claim 30; line 4; "a correction device" should be changed to --the correction device-

Claim 31, line 1; "a modulator" should be changed to --the modulator--.

Claim 34, line 3; delete "implementing the method of Kahn" at the end of the line.

Claim 35: line 1: "the radio" should be changed to --a radio--.

## Allowable Subject Matter

Claims 25-35 are allowed.

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The following is a statement of reasons for the indication of allowable subject matter: The present invention comprises a method and apparatus for correcting a delay between the phase and the envelope of a digital signal. The method comprises a decomposition of the signal into two signals, envelope and phase, a determination of the corrector to be applied to the parameter of the envelope, said corrector being obtained by searching, among predetermined values, for the value of the corrector corresponding to the minimum of the out-of-band noise power of the output signal of a digital signal processing chain comprising a correction as a function of said corrector, the complex digital signal being the only necessary signal to determine the corrector c. The closest prior arts (Cao in view of Yang) as a whole, discloses the decomposition of the signal and determining the corrector however, fails to discloses explicitly the method of determining corrector value including a successive application of various predetermined values of the corrector c to the envelope, a multiplication of the corrected envelope and of the phase for each value of the corrector c, a transposition into the frequency domain of the signals thus obtained for each of the predetermined values of the corrector c, the comparison of the out-of-band noise powers for each of the predetermined values of the corrector, the value adopted for corrector being that corresponding to the smallest out-of- band noise power. The distinct feature of has been added to claims 25 and 26, rendering them allowable.

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## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DHAVAL PATEL whose telephone number is (571)270-1818. The examiner can normally be reached on M-F 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dhaval Patel/ Examiner, Art Unit 2611 1/13/2009 /Shuwang Liu/ Supervisory Patent Examiner, Art Unit 2611